



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-468



B61 Mod 12 Life Extension Program Tailkit Assembly (B61 Mod 12 LEP TKA)

As of FY 2015 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
BA - Budget Authority/Budget Activity
BY - Base Year
DAMIR - Defense Acquisition Management Information Retrieval
Dev Est - Development Estimate
DoD - Department of Defense
DSN - Defense Switched Network
Econ - Economic
Eng - Engineering
Est - Estimating
FMS - Foreign Military Sales
FY - Fiscal Year
IOC - Initial Operational Capability
\$K - Thousands of Dollars
LRIP - Low Rate Initial Production
\$M - Millions of Dollars
MILCON - Military Construction
N/A - Not Applicable
O&S - Operating and Support
Oth - Other
PAUC - Program Acquisition Unit Cost
PB - President's Budget
PE - Program Element
Proc - Procurement
Prod Est - Production Estimate
QR - Quantity Related
Qty - Quantity
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
Sch - Schedule
Spt - Support
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting

Program Information

Program Name

B61 Mod 12 Life Extension Program Tailkit Assembly (B61 Mod 12 LEP TKA)

DoD Component

Air Force

Responsible Office

Responsible Office

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References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated December 14, 2012

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated December 14, 2012

Mission and Description

The B61 Mod 12 Life Extension Program will consolidate Modifications 3, 4, 7 and 10 into a single modification (B61-12) while extending the system's service life. B61-12 is an air-delivered nuclear gravity weapon providing nuclear capability on existing legacy aircraft and dual capable aircraft. The single variant will operate in two modes: System 1 (analog/ballistic mode) and System 2 (digital/guided mode).

The B61 Mod 12 Life Extension Program Tailkit Assembly (B61 Mod 12 LEP TKA) (herein referred to as B61-12 TKA) is the enabler for realizing System 2. This is an Air Force led, joint DoD/Department of Energy (DOE) program managed through the B61 LEP Project Officers Group and its subgroups.

The DoD responsibility is accomplished through a partnership between the Air Force Life Cycle Management Center (AFLCMC) and Air Force Nuclear Weapons Center (AFNWC). In accordance with the Air Force Materiel Command mission assignment memorandum (dated February 11, 2011) and the National Nuclear Security Administration (NNSA)/AFNWC Memorandum of Understanding (dated June 28, 2012), the AFLCMC is responsible for the development, acquisition, and delivery of a guided tailkit assembly and the AFNWC is responsible for all-up-round technical integration, system qualification, and fielding of the B61-12 variant.

Additionally, the AFNWC has overall responsibility for B61-12 programmatic integration and operational safety, suitability, and effectiveness.

The DOE/NNSA is responsible for the B61-12 Bomb Assembly and all aspects of the nuclear warhead, including design, manufacture, and portions of sustainment. Funding of these activities will be shared between the DoD and DOE.

Executive Summary

The B61-12 TKA is an Air Force led Acquisition Category ID program in the Engineering and Manufacturing Development (EMD) phase.

In February 2012, the Nuclear Weapons Council, chaired by the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)), authorized the B61 Life Extension Program to progress to Phase 6.3 of the nuclear systems life cycle as defined by DoD Instruction 5030.55. This major milestone cleared the path for the National Nuclear Security Administration to begin Engineering Development for the B61-12 warhead refurbishment effort.

In April 2012, the USD(AT&L) directed the B61-12 TKA program office to proceed to a Milestone B decision based on the maturity of the required technology. On November 19, 2012, the Department of the Air Force was granted approval of Milestone B and authorization to enter the EMD phase.

In November 2012, in conjunction with the Milestone B decision, certification was made pursuant to section 2366b of title 10, United States Code. Based on program maturity, the B61-12 TKA was deemed ready to enter the EMD phase; however, the USD(AT&L) waived four of the 2366b provisions. The certification requirement for two of the four waived provisions, (a)(1)(B) and (a)(1)(D), was not able to be satisfied with submission of the FY 2013 PB and the associated Future Years Defense Program. Relative to the third waived provision, (a)(2), the program will satisfy the certification requirement upon completion of the Preliminary Design Review (PDR) and associated post-PDR assessment. Based on the maturity of the required technology, the USD(AT&L) determined that a Technology Readiness Assessment for the B61-12 TKA is not needed; however, based on similar information at the appropriate time during EMD, the Assistant Secretary of Defense for Research and Engineering will conduct an independent review and assessment of the required technology to satisfy the certification requirement for the fourth waived provision, (a)(3)(D). The Department will continue to review the B61-12 TKA program at least annually until the certification components are satisfied.

On November 27, 2012, the B61-12 TKA program office awarded a Cost Plus Incentive Fee contract to Boeing for EMD Phase 1 with priced options for EMD Phase 2 and a Technical Data Package. In addition, the contract contains production lot design-to-unit-cost goals, which are tied to performance incentives for the production phase of the program. Finally, the APB was approved on December 14, 2012. Major risks include concurrent development activities being conducted by the DoD for the B61-12 TKA and the Department of Energy for the Bomb Assembly. Therefore, threshold dates are one year beyond objective dates in the APB for Milestone C, First TKA Production Delivery, and Full Rate Production Decision to mitigate the risks associated with concurrent development activities.

In April 2013, the B61-12 TKA program office completed a System Requirements Review followed by a System Functional Review in May 2013. In August 2013, the B61-12 TKA program office, in conjunction with Boeing, completed the EMD Phase 1 Integrated Baseline Review. In November 2013, the B61-12 TKA program office conducted a PDR and identified action items that are required to be resolved prior to PDR completion, which is expected to occur in May 2014.

There are no significant software-related issues with this program at this time.

Threshold Breaches

APB Breaches

Schedule ☐

Performance ☐

Cost ☐

RDT&E ☐

Procurement ☐

MILCON ☐

Acq O&M ☐

O&S Cost ☐

Unit Cost ☐

PAUC ☐

APUC ☐

Nunn-McCurdy Breaches

Current UCR Baseline

PAUC None

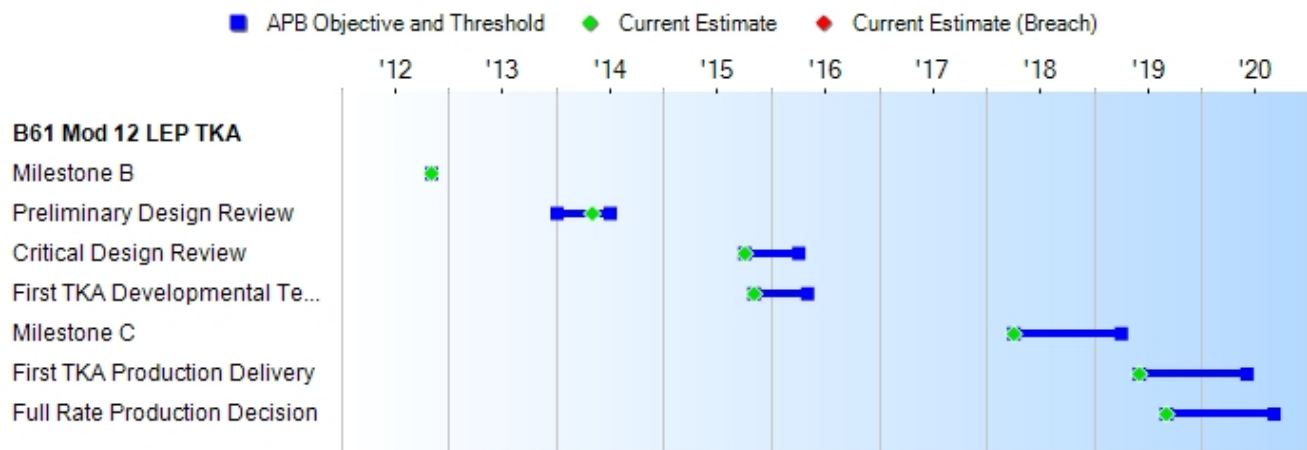
APUC None

Original UCR Baseline

PAUC None

APUC None

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	
Milestone B	NOV 2012	NOV 2012	NOV 2012	NOV 2012	
Preliminary Design Review	JAN 2014	JAN 2014	JUL 2014	MAY 2014	(Ch-1)
Critical Design Review	OCT 2015	OCT 2015	APR 2016	OCT 2015	
First TKA Developmental Test Flight	NOV 2015	NOV 2015	MAY 2016	NOV 2015	
Milestone C	APR 2018	APR 2018	APR 2019	APR 2018	
First TKA Production Delivery	JUN 2019	JUN 2019	JUN 2020	JUN 2019	
Full Rate Production Decision	SEP 2019	SEP 2019	SEP 2020	SEP 2019	

Change Explanations

(Ch-1) The current estimate for Preliminary Design Review changed from January 2014 to May 2014 to enable closure of the action items identified during the PDR conducted in November 2013.

Memo

Risks associated with concurrent development activities being conducted by the DoD and the DOE drive threshold dates that are one year beyond objective dates for Milestone C and Full Rate Production Decision

Risks associated with concurrent development activities being conducted by the DoD and the DOE drive a threshold date that is one year beyond the objective date for First TKA Production Delivery. Delivery of the first production unit (First TKA Production Delivery) is used as a surrogate for IOC; DOE is responsible for production integration of the Bomb Assembly/TKA and subsequent all-up-round deliveries to the field for IOC.

Acronyms and Abbreviations

DOE - Department of Energy

PDR - Preliminary Design Review

TKA - Tailkit Assembly

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
Aircraft Integration (KPP)	B61-12 TKA, when mated to the B61-12 BA, must be integrated on the F-35A and LRS-B for System 2 guided delivery; F-16C/D (Blk 40-52), F-16 MLU, and PA-200 for System 1 ballistic delivery.	B61-12 TKA, when mated to the B61-12 BA, must be integrated on the F-35A and LRS-B for System 2 guided delivery; F-16C/D (Blk 40-52), F-16 MLU, and PA-200 for System 1 ballistic delivery.	B61-12 TKA, when mated to the B61-12 BA, must be integrated on B-2A and F-15E aircraft for System 2 guided delivery.	TBD	B61-12 TKA, when mated to the B61-12 BA, must be integrated on the F-35A and LRS-B for System 2 guided delivery; F-16C/D (Blk 40-52), F-16 MLU, and PA-200 for System 1 ballistic delivery.
WS3 Vault Compatibility (KPP)	B61-12 TKA, while mated to the B61-12 BA, must permit the storage of four (4) B61-12 AURs in a single WS3 vault.	B61-12 TKA, while mated to the B61-12 BA, must permit the storage of four (4) B61-12 AURs in a single WS3 vault.	B61-12 TKA, while mated to the B61-12 BA, must permit the storage of four (4) B61-12 AURs in a single WS3 vault.	TBD	B61-12 TKA, while mated to the B61-12 BA, must permit the storage of four (4) B61-12 AURs in a single WS3 vault.
HEMP Survivability (KSA)	B61 TKA achieves the accuracy KPP after exposure to the HEMP environment.	B61 TKA achieves the accuracy KPP after exposure to the HEMP environment.	B61 TKA achieves the accuracy KPP after exposure to the HEMP environment.	TBD	B61 TKA achieves the accuracy KPP after exposure to the HEMP environment.

Classified Performance information is provided in the classified annex to this submission.

Requirements Source

Capability Development Document (CDD) dated September 20, 2012

Change Explanations

None

Acronyms and Abbreviations

AUR - All-Up-Round
BA - Bomb Assembly
Blk - Block
HEMP - High Altitude Electro-Magnetic Pulse
KPP - Key Performance Parameter
KSA - Key System Attribute
LRS-B - Long Range Strike-Bomber
MLU - Mid-Life Upgrade
TKA - Tailkit Assembly
WS3 - Weapon Storage and Security System

Track to Budget

RDT&E

Appn	BA	PE
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Air Force 3600 05 0101125F

Project	Name
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657007 B61 LEP

Procurement

Appn	BA	PE
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Air Force 3011 01 0101125F

Line Item	Name
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354040 B61

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2012 \$M			BY2012 \$M	TY \$M		
	SAR Baseline Dev Est	Current APB Development Objective/Threshold	Current Estimate		SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	1007.6	1007.6	1108.4	1001.1	1090.7	1090.7	1090.7
Procurement	314.0	314.0	345.4	316.5	361.1	361.1	361.1
Flyaway	--	--	--	316.5	--	--	361.1
Recurring	--	--	--	316.5	--	--	361.1
Non Recurring	--	--	--	0.0	--	--	0.0
Support	--	--	--	0.0	--	--	0.0
Other Support	--	--	--	0.0	--	--	0.0
Initial Spares	--	--	--	0.0	--	--	0.0
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	1321.6	1321.6	N/A	1317.6	1451.8	1451.8	1451.8

Confidence Level for Current APB Cost 56% -

The confidence level for the Engineering and Manufacturing Development (EMD) total estimate is 56%; the confidence level for the Procurement estimate is 51%; and the confidence level for the Operating and Support (O&S) estimate is 50%.

The Acquisition Program Baseline (APB) costs reflect the Service Cost Position (SCP), which was approved on October 19, 2012. The SCP aims to provide sufficient resources to execute the program under normal conditions, encountering average levels of technical, schedule, and programmatic risk and external interference. It is consistent with average resource expenditures on historical efforts of similar size, scope, and complexity. Therefore, the approved SCP represents a mean cost estimate.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	77	77	77
Procurement	813	813	813
Total	890	890	890

Cost and Funding

Funding Summary

Appropriation and Quantity Summary FY2015 President's Budget / December 2013 SAR (TY\$ M)

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	144.0	33.0	198.4	213.5	207.9	153.7	97.3	42.9	1090.7
Procurement	0.0	0.0	0.0	0.0	0.0	147.9	210.7	2.5	361.1
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2015 Total	144.0	33.0	198.4	213.5	207.9	301.6	308.0	45.4	1451.8
PB 2014 Total	161.8	67.9	200.6	216.0	210.2	304.2	287.0	4.1	1451.8
Delta	-17.8	-34.9	-2.2	-2.5	-2.3	-2.6	21.0	41.3	0.0

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	77	0	0	0	0	0	0	0	0	77
Production	0	0	0	0	0	0	250	563	0	813
PB 2015 Total	77	0	0	0	0	0	250	563	0	890
PB 2014 Total	77	0	0	0	0	0	250	563	0	890
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY\$

3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2012	--	--	--	--	--	--	81.6
2013	--	--	--	--	--	--	62.4
2014	--	--	--	--	--	--	33.0
2015	--	--	--	--	--	--	198.4
2016	--	--	--	--	--	--	213.5
2017	--	--	--	--	--	--	207.9
2018	--	--	--	--	--	--	153.7
2019	--	--	--	--	--	--	97.3
2020	--	--	--	--	--	--	42.9
Subtotal	77	--	--	--	--	--	1090.7

Annual Funding BY\$**3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2012 \$M	Non End Item Recurring Flyaway BY 2012 \$M	Non Recurring Flyaway BY 2012 \$M	Total Flyaway BY 2012 \$M	Total Support BY 2012 \$M	Total Program BY 2012 \$M
2012	--	--	--	--	--	--	80.8
2013	--	--	--	--	--	--	60.7
2014	--	--	--	--	--	--	31.6
2015	--	--	--	--	--	--	186.4
2016	--	--	--	--	--	--	196.7
2017	--	--	--	--	--	--	187.8
2018	--	--	--	--	--	--	136.1
2019	--	--	--	--	--	--	84.5
2020	--	--	--	--	--	--	36.5
Subtotal	77	--	--	--	--	--	1001.1

Annual Funding TY\$**3011 | Procurement | Procurement of Ammunition, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2018	250	147.9	--	--	147.9	--	147.9
2019	563	210.7	--	--	210.7	--	210.7
2020	--	--	2.5	--	2.5	--	2.5
Subtotal	813	358.6	2.5	--	361.1	--	361.1

Annual Funding BY\$**3011 | Procurement | Procurement of Ammunition, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2012 \$M	Non End Item Recurring Flyaway BY 2012 \$M	Non Recurring Flyaway BY 2012 \$M	Total Flyaway BY 2012 \$M	Total Support BY 2012 \$M	Total Program BY 2012 \$M
2018	250	131.0	--	--	131.0	--	131.0
2019	563	183.4	--	--	183.4	--	183.4
2020	--	--	2.1	--	2.1	--	2.1
Subtotal	813	314.4	2.1	--	316.5	--	316.5

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	11/19/2012	11/19/2012
Approved Quantity	250	250
Reference	Milestone B ADM	Milestone B ADM
Start Year	2018	2018
End Year	2018	2018

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the low production run and the need to synchronize DoD deliveries with the Department of Energy B61-12 Bomb Assembly program.

Foreign Military Sales

None

Nuclear Costs

Nuclear costs related to the B61-12 TKA program are captured in the Department of Energy Bomb Assembly SAR.

Unit Cost

Unit Cost Report

	BY2012 \$M	BY2012 \$M	
Unit Cost	Current UCR Baseline (DEC 2012 APB)	Current Estimate (DEC 2013 SAR)	BY % Change

Program Acquisition Unit Cost (PAUC)

Cost	1321.6	1317.6	
Quantity	890	890	
Unit Cost	1.485	1.480	-0.34

Average Procurement Unit Cost (APUC)

Cost	314.0	316.5	
Quantity	813	813	
Unit Cost	0.386	0.389	+0.78

	BY2012 \$M	BY2012 \$M	
Unit Cost	Original UCR Baseline (DEC 2012 APB)	Current Estimate (DEC 2013 SAR)	BY % Change

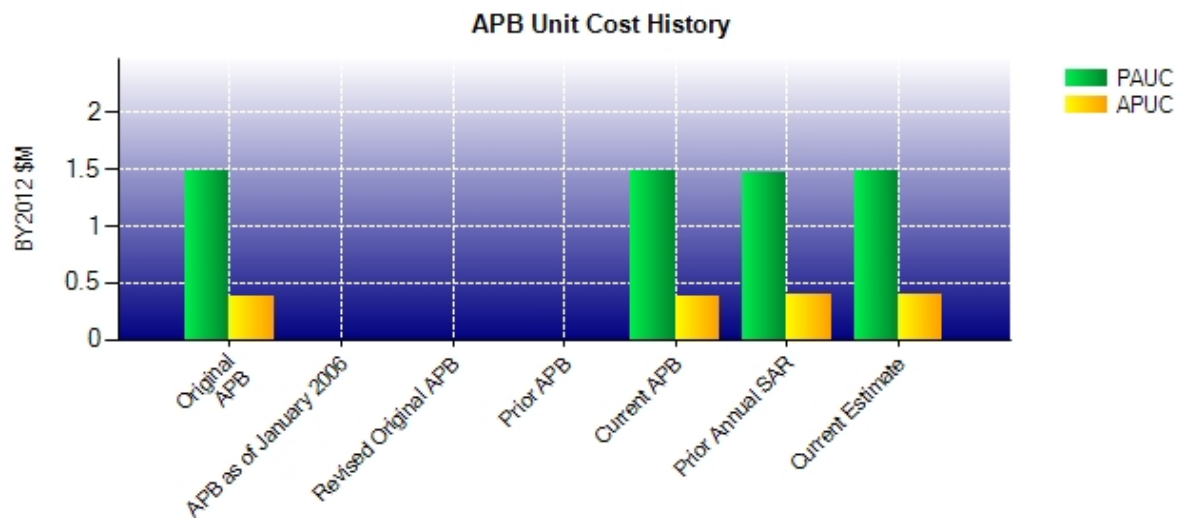
Program Acquisition Unit Cost (PAUC)

Cost	1321.6	1317.6	
Quantity	890	890	
Unit Cost	1.485	1.480	-0.34

Average Procurement Unit Cost (APUC)

Cost	314.0	316.5	
Quantity	813	813	
Unit Cost	0.386	0.389	+0.78

Unit Cost History



	Date	BY2012 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	DEC 2012	1.485	0.386	1.631	0.444
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	DEC 2012	1.485	0.386	1.631	0.444
Prior Annual SAR	DEC 2012	1.478	0.389	1.631	0.444
Current Estimate	DEC 2013	1.480	0.389	1.631	0.444

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
1.631	0.001	0.000	0.000	0.000	-0.001	0.000	0.000	0.000	1.631

Current SAR Baseline to Current Estimate (TY \$M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.444	-0.003	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.444

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	NOV 2012	N/A	NOV 2012
Milestone C	N/A	APR 2018	N/A	APR 2018
IOC	N/A	JUN 2019	N/A	JUN 2019
Total Cost (TY \$M)	N/A	1451.8	N/A	1451.8
Total Quantity	N/A	890	N/A	890
Prog. Acq. Unit Cost (PAUC)	N/A	1.631	N/A	1.631

First Tailkit Assembly (TKA) Production Delivery is used as a surrogate for IOC; the Department of Energy is responsible for production integration of the Bomb Assembly/TKA and subsequent all-up-round deliveries to the field for IOC.

Cost Variance

Summary Then Year \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1090.7	361.1	--	1451.8
Previous Changes				
Economic	+12.1	-2.6	--	+9.5
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-12.1	+2.6	--	-9.5
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Current Changes				
Economic	-8.9	--	--	-8.9
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+8.9	--	--	+8.9
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Total Changes	--	--	--	--
CE - Cost Variance	1090.7	361.1	--	1451.8
CE - Cost & Funding	1090.7	361.1	--	1451.8

Summary Base Year 2012 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	1007.6	314.0	--	1321.6
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	-8.7	+2.6	--	-6.1
Other	--	--	--	--
Support	--	--	--	--
Subtotal	-8.7	+2.6	--	-6.1
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+2.2	-0.1	--	+2.1
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+2.2	-0.1	--	+2.1
Total Changes	-6.5	+2.5	--	-4.0
CE - Cost Variance	1001.1	316.5	--	1317.6
CE - Cost & Funding	1001.1	316.5	--	1317.6

Previous Estimate: December 2012

RDT&E	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-8.9
Adjustment for current and prior escalation. (Estimating)	+1.3	+1.3
Revised estimate to reflect the application of new outyear escalation indices. (Estimating)	+0.9	+7.6
RDT&E Subtotal	+2.2	0.0

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised estimate to reflect the application of new outyear escalation indices. (Estimating)	-0.1	0.0
Procurement Subtotal	-0.1	0.0

Contracts

Appropriation: RDT&E

Contract Name	B61-12 TKA EMD Phase 1
Contractor	Boeing
Contractor Location	2600 N 3rd Street St. Charles, MO 63301
Contract Number, Type	FA2103-13-C-0006, CPIF
Award Date	November 27, 2012
Definitization Date	November 27, 2012

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price at Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
178.6	N/A	N/A	180.8	N/A	N/A	187.9	184.0

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to additional requirement modifications post initial contract award.

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (1/30/2014)	+5.5	-0.9
Previous Cumulative Variances	0.0	0.0
Net Change	+5.5	-0.9

Cost and Schedule Variance Explanations

The favorable cumulative cost variance is due to test activities completed more efficiently than planned for F-15E and F-16 aircraft integration. Additionally, the underrun of program management activities is directly related to the overall favorable cost variance for the program.

The unfavorable cumulative schedule variance is due to late deliveries of hardware as well as pending design requirements for actuators and technical challenges with mission computer, driving delays to launch system integration, assembly, test, and checkout.

Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	77	0.00%
Production	0	0	813	0.00%
Total Program Quantity Delivered	0	0	890	0.00%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	1451.8	Years Appropriated	3
Expended to Date	74.7	Percent Years Appropriated	33.33%
Percent Expended	5.15%	Appropriated to Date	177.0
Total Funding Years	9	Percent Appropriated	12.19%

The above data is current as of 2/28/2014.

Operating and Support Cost

B61 Mod 12 LEP TKA

Assumptions and Ground Rules

Cost Estimate Reference:

Source of Estimate: Service Cost Position

Date Approved: October 19, 2012

Sustainment Strategy:

- All dollars were estimated in BY 2012
- Total Operations and Maintenance Cost = \$125.6M
- Total Quantity = 824
 - Production quantity: 813
 - Trainers in RDT&E quantity: 11
- Service Life = 20 years
- Average Annual Operations and Maintenance Unit Cost = \$.008M
 - Calculation: $\$125.6\text{M}/824/20$
- Used Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (now known as Cost Assessment and Program Evaluation) O&S Cost Estimating Guide, October 2007, for Work Breakdown Structure and Content
- Used Air Force Cost Analysis Agency (Eglin location) Risk Template for cost risk assessment
- Estimate assumes wooden round -- Production Lifetime Sparing Concept
- Contractor services retained for failure analysis, test support, logistical support, destructive testing, etc.
- Projected contractor labor rates are through FY 2040
 - Used 4% increase in base pay rate to account for differences in contractor inflation versus OSD published inflation
- No nuclear certification required for Tailkit Assembly Stand-Alone Test Sets
- Continental United States (CONUS) shipping costs for Weapon System Evaluation Program assets paid by the Department of Energy
- Personnel Outside of the CONUS locations exist solely to support this weapon

Antecedent Information:

None

Unitized O&S Costs BY2012 \$K			
Cost Element	B61 Mod 12 LEP TKA Average Annual Cost Per TKA	None (Antecedent)	
Unit-Level Manpower	0.069		--
Unit Operations	0.001		--
Maintenance	0.005		--
Sustaining Support	0.015		--
Continuing System Improvements	0.000		--
Indirect Support	0.042		--
Other	0.000		--
Total	0.132		--

Unitized Cost Comments:

Total O&S Cost: \$2,283.3M (in BY 2012 dollars)

Average Annual Unitized Cost = (Total O&S Cost/824)/21 years

Total O&S Cost \$M				
	Current Development APB Objective/Threshold		Current Estimate	
	B61 Mod 12 LEP TKA		B61 Mod 12 LEP TKA	None (Antecedent)
Base Year	2283.3	2511.6	2283.3	N/A
Then Year	2887.3	N/A	2887.3	N/A

Total O&S Costs Comments:

None

Disposal Costs:

\$0.120M in BY 2012 dollars

\$0.190M in TY dollars